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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/085,752   | 02/27/2002  | Bo Soon Chang        | CYPR-PM01011        | 8457             |
| 7590   | 05/07/2004  |                      | EXAMINER            |                  |
| WAGNER, MURABITO & HAO LLP<br>Two North Market Street, Third Floor<br>San Jose, CA 95113 |             |                      | STEVENSON, ANDRE C  |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      |                     | 2812             |

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/085,752             | CHANG, BO SOON      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Andre' C. Stevenson    | 2812                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

#### Status

- 1) Responsive to communication(s) filed on 09 February 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 11-37 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 5-10 is/are rejected.
- 7) Claim(s) 2,3,4 is/are objected to.
- 8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - a) All b) Some \* c) None of the CERTIFIED copies of the priority documents have been:
    1. received.
    2. received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
    3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

#### Attachment(s)

- |   |  |
|---|--|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 20) <input type="checkbox"/> Other: _____                                    |

## Detail Action

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5 through 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (U.S. Pat. No.6173750 B1), and further in view of Reynolds et al (U.S. Pat. No.5547537).

Davis et al (U.S. Pat. No.6173750 B1), for **Claim #1**, a control method comprising: traversing a die-strip through a plurality of substations of an in-line, back-end, integrated circuit (IC) device assembly line; automatically examining said die-strip at multiple locations within said plurality of substations using a plurality of automated vision camera systems (**Abstract, Column 1, lines 11 through 19, Column 8, lines 51 through 67, Column 11, lines 6 through 26**); collecting information regarding said examining from said plurality of automated vision camera systems and storing said information in a memory resident database of a central computer system; and controlling processes of said plurality of substations using a common communication protocol and commands and data issued from said central computer system.

Davis et al (U.S. Pat. No.6173750 B1) discloses the claimed invention except for the collecting of information regarding said examining from said plurality of automated vision camera systems and storing said information in a memory resident database of a central computer system; and controlling processes of said plurality of substations using a common communication protocol and commands and data issued from said central computer system. Reynolds et al (U.S. Pat. No.5547537) teaches that it is known to have collecting information regarding said examining from said plurality of automated vision camera systems and storing said information in a memory resident database of a central computer system; and controlling processes of said plurality of substations using a common communication protocol and commands and data issued from said central computer system.

With respect to **Claim #1**, a collecting information regarding said examining from said plurality of automated vision camera systems and storing said information in a memory resident database of a central computer system; and controlling processes of said plurality of substations using a common communication protocol and commands and data issued from said central computer system, is taught by Reynolds et al (U.S. Pat. No.5547537), (Column 5, lines 40 through 67, Column 6, lines 1 through 2, Column 6, lines 40 through 67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to collecting information regarding said examining from said plurality of automated vision camera systems and storing said information in a memory resident database of a central computer system; and controlling processes of said plurality of substations using a common communication protocol and commands and data issued from said central computer system as taught by Reynolds et al (U.S. Pat. No.5547537), since Reynolds et al (U.S. Pat. No.5547537) states at Column 6, lines 40 through 67 that such a modification would allow monitored to insure that excess force is not placed on the die.

Furthermore, **Claim #5**, a method as described in Claim 1 wherein said collecting information comprises: communicating said information from said plurality of automated vision systems to an equipment cell controller; and communicating said information from said equipment cell controller to said central computer system, is taught by Reynolds et al (U.S. Pat. No.5547537), (Column 5, lines 40 through 67, Column 6, lines 1 through 2, lines 40 through 67). Davis et al (U.S. Pat. No.6173750 B1)

Considering now, **Claim #6**, a method as described in Claim 5 wherein said controlling comprises: communicating said commands and data from said central computer system to said equipment cell controller; and communicating said commands and data from said equipment cell controller to said plurality of substations, is taught by

Reynolds et al (U.S. Pat. No.5547537) (Column 11, lines 51 through 67, Column 12, lines 55 through 67, Column 13, lines 1 through 7); and is also taught by Davis et al (U.S. Pat. No.6173750 B1) (Column 6, lines 53 through 67, Column 7, lines 1 through 3)

With respect to **Claim #7**, a method as described in Claim 1 wherein said plurality of substations comprise a front-of-line portion and an end-of-line portion and wherein said collecting information comprises: communicating information from a first portion of said plurality of automated vision systems of said front-of-line portion to a first equipment cell controller; communicating information from a second portion of said plurality of automated vision systems of said end-of-line portion to a second equipment cell controller; and communicating said information from said first and second equipment cell controllers to said central computer system, is taught by Davis et al (U.S. Pat. No.6173750 B1) (**Abstract, Column 1, lines 11 through 19, Column 8, lines 51 through 67, Column 11, lines 6 through 26**), and Reynolds et al (U.S. Pat. No.5547537), (**Column 5, lines 40 through 67, Column 6, lines 1 through 2, Column 6, lines 40 through 67**).

Furthermore, **Claim #8**, a method as described in Claim 7 wherein said controlling comprises: communicating first commands and data from said central computer system to said first equipment cell controller; communicating said first commands and data from said first equipment cell controller to said front-of-line portion of said plurality of substations; communicating second commands and data from said

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central computer system to said second equipment cell controller; and communicating said second commands and data from said second equipment cell controller to said end-of-line portion of said plurality of substations, is taught by Davis et al (U.S. Pat. No.6173750 B1) (**Abstract, Column 1, lines 11 through 19, Column 8, lines 51 through 67, Column 11, lines 6 through 26**), and Reynolds et al (U.S. Pat. No.5547537), (**Column 5, lines 40 through 67, Column 6, lines 1 through 2, Column 6, lines 40 through 67**).

Considering now, **Claim #9**, a method as described in Claim 1 wherein said collecting information further comprises determining a location of said die-strip by one of said automated vision camera systems identifying a unique code associated with said die-strip, is taught by Davis et al (U.S. Pat. No.6173750 B1) (**Abstract, Column 1, lines 11 through 19, Column 8, lines 51 through 67, Column 11, lines 6 through 26**), and Reynolds et al (U.S. Pat. No.5547537), (**Column 5, lines 40 through 67, Column 6, lines 1 through 2, Column 6, lines 40 through 67**).

Considering now, **Claim #10**, a method as described in Claim 1 wherein said traversing is controlled by said central computer system, is taught by Davis et al (U.S. Pat. No.6173750 B1) (**Abstract, Column 1, lines 11 through 19, Column 8, lines 51 through 67, Column 11, lines 6 through 26**), and Reynolds et al (U.S. Pat. No.5547537), (**Column 5, lines 40 through 67, Column 6, lines 1 through 2, Column 6, lines 40 through 67**).

## **Objected Matter**

Claim 2, 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Claim #2**

- ✓ Computer system is a manufacturing execution system (MES).

### **Claim #3**

- ✓ Version of the standard semi equipment communications standard / generic equipment model (SECS / GEM).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866 – 217 – 9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' Stevenson whose telephone number is (571) 272 1683. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling, can be reached on (571) 272 1679. The fax phone number for the organization where this application or proceeding is assigned is (703) 308 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956. Also, the proceeding numbers can be used to fax information through the Right Fax system;

**(703) 872-9306**

Andre' Stevenson  
Art Unit 2812  
04/29/04



John F. Niebling  
Supervisory Patent Examiner  
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